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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,814	02/27/2004	John G. Babish	068911-0075	5630

7590 02/07/2006
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EXAMINER

KANTAMNENI, SHOBHA

ART UNIT PAPER NUMBER

1617

DATE MAILED: 02/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Claims 1-7 are pending .

The Amendment received on 11/07/2005, wherein claims 1-7 have been amended.

Applicant's amendment to claims 5, and 6 is sufficient to overcome the objection made in the previous office action, and the objection is herein withdrawn.

Applicant's amendment by inserting the language "for reducing PGE2 mediated inflammation" is sufficient to overcome the rejection of claims 4-7 under 35 U.S.C. 112, first paragraph.

Applicant's arguments are persuasive and the rejection of claims 1, and 4 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention is herein withdrawn.

Applicant's arguments are persuasive and the rejection of claims 1-7 under 35 U.S.C. 103(a) as being unpatentable over Tobe (US 5,604,263, PTO-892) is herein withdrawn.

Applicant's arguments are persuasive, and the rejection of claims 1-7 under 35 U.S.C. 103(a) as being unpatentable over Kuhrts (US 2002/0086070, PTO-892) is herein withdrawn.

Applicant's arguments are not persuasive, and the rejection of claim 7 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and

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distinctly claim the subject matter which applicant regards as the invention is MAINTAINED.

The rejection of claims 1-7 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-115 of copending Application No. 10/464410; unpatentable over claims 1-34 of copending Application No. 10/464834; unpatentable over claims 1-12 of copending Application No. 10/774048 is MAINTAINED. Note: Applicant traverse the rejections, and requests that such rejections be held in abeyance pending the allowance of any of the underlying claims.

Claims 1-7 are examined herein.

Applicant's amendment that inserts new limitation in the independent claims 1, 4, and 7 necessitated the new ground(s) of rejection presented in this Office action.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 7 recites the limitation "said RIAA and IAA" in the claim. There is insufficient antecedent basis for this limitation in the claim.

Claims 7 is further rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrases "wherein R is alkyl" renders the claim indefinite, as it is not clear what other compounds this phrase encompasses, since one of ordinary skill in the art would not ascertain the metes and bounds as to "wherein R is alkyl".

Response to arguments:

Applicants argument that "wherein R is alkyl" is not indefinite in that term "alkyl" as defined in any introductory chemistry text (see e.g., R. T. Morrison, R. N. Boyd, Organic Chemistry, Allyn and Bacon, Inc. (1983), Attachment A), refers to those substituents defined as C_nH_{2n+1} is not persuasive because alkyl group can be any group C_nH_{2n+1} , wherein n can be any number greater than zero, which renders the claim indefinite.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuhrts (US 2004/0137096, PTO-892).

Kuhrts teaches pharmaceutical compositions comprising hops extract consisting of iso-alpha acids (IAA), and reduced iso-alpha acids (RIAA) such as iso-humulone, isohumulone, iso-adhumulone, dihydroiso-humulone, dihydroiso-adhumulone of the instant formula (Genus A), and combinations thereof. It is also disclosed that iso-alpha

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acids which are combinations of reduced isoalpha acid(RIAA) and isoalpha acid(IAA) will be present in an amount of 0.5 % to 10 % by weight in the hops extract. See page 4, paragraph [0027]; page [0031]; page 5, paragraph [0034], Example 1, wherein 3 % of Iso-alpha acids are present in the Hops extract; page 6, claims 1-5, 21-25.

Furthermore Kuhrts teaches the same method of reducing inflammation as instantly claimed, comprising administering Hops extract consisting of Iso-alpha acids and reduced iso-alpha acids such as iso-humulone, iso-cohumolone, iso-adhumolone, dihydroiso-humulone, dihydroiso-adhumolone. See page 5, paragraphs [0035]-[0038]; page 7, claims 1, 9, 13, 21, 25.

Kuhrts does not expressly teach the ratio of reduced isoalpha acid : isoalpha acid as about 3:1 to about 1:10, in the composition.

Kuhrts does not expressly teach that the composition contains at least 0.1 % of RIAA and IAA individually.

It would have been obvious to a person of ordinary skill in the art at the time of invention to determine or optimize parameters such as effective amounts of the reduced isoalpha acid and isoalpha acid employed in the composition of Kuhrts, to obtain a desired effect such as reducing inflammation.

One having ordinary skill in the art at the time the invention was made would have been motivated to determine the effective amounts of Iso-alpha acid and reduced isoalpha acid employed in the pharmaceutical compositions for methods of reducing inflammation in which the ratio of reduced isoalpha acid : isoalpha acid is about 3:1 to about 1:10, since the optimization of effective amounts of known agents to be

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administered , is considered well in the competence level of an ordinary skilled artisan in pharmaceutical science, involving merely routine skill in the art.

One having ordinary skill in the art at the time the invention was made would have been motivated to determine the effective amounts of Iso-alpha acid (IAA) and reduced isoalpha acid (RIAA) employed in the pharmaceutical compositions for methods of reducing inflammation as 0.1 % of RIAA and 0.1 % of IAA, since the optimization of effective amounts of known agents to be administered, is considered well in the competence level of an ordinary skilled artisan in pharmaceutical science, involving merely routine skill in the art.

It has been held that it is within the skill in the art to select optimal parameters, such as amounts of ingredients, in a composition in order to achieve a beneficial effect. See *In re Boesch*, 205 USPQ 215 (CCPA 1980).

Note: The ratio of RIAA to IAA of the instant claims such as 3:1 to 1:10 as in claim 1; and 10:1 to 1:10 as in claim 7 is broad and might read on the ratio of the prior art composition, hops extract. The individual amounts of RIAA and IAA of the instant claims such as at least 0.1 % of the composition as in independent claims 1, 4, 7, includes any amount between 0.1 % to 99 % which is broad and might read on the prior art composition containing hops extract.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11

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F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-7 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-115 of copending Application No. 10/464410, rejection of record. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter embraced in the instant claims overlaps with the stated claims of 10/464410. Note that "A composition comprising, as a first component, a fraction derived from hops" in the copending application implies that the composition would contain isoalpa and reduced isoalpa acid . The claimed composition, and method of reducing inflammation are within the scope of the claims of the copending Application 10/464410. It would have been obvious to a person of ordinary skill in the art at the time of invention to optimize parameters such as effective amounts of the reduced isoalpa acid : isoalpa acid, to treat inflammation.

Claims 4-7 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-34 of copending Application No. 10/464834, rejection of record. Although the conflicting claims are not identical, they are not patentably distinct from each other because the

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subject matter embraced in the instant claims overlaps with the stated claims of 10/464834. Note that, "comprising a fraction isolated or derived from hops" in the copending application implies that the pharmaceutical composition would contain isoalpa and reduced isoalpa acid. The claimed method of reducing inflammation is within the scope of the claims of the copending Application 10/464834. It would have been obvious to a person of ordinary skill in the art at the time of invention to optimize parameters such as effective amounts of the reduced isoalpa acid : isoalpa acid, to obtain a desired effect such as reducing inflammation.

Claims 1-3 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-12 of copending Application No. 10/689856, and over claims 1-6 of copending Application 10/774048, rejection of record. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter embraced in the instant claims overlaps with the stated claims of 10/689856. Note that, "A composition comprising as a first component, a fraction isolated or derived from hops" in the copending applications implies that the pharmaceutical composition would contain isoalpa and reduced isoalpa acid. The claimed composition is within the scope of the claims of the copending Application 10/689856, and 10/774048. It would have been obvious to a person of ordinary skill in the art at the time of invention to optimize parameters such as effective amounts of the reduced isoalpa acid : isoalpa acid, to obtain a desired effect.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

No claims are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period, will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shobha Kantamneni whose telephone number is 571-272-2930. The examiner can normally be reached on Monday-Friday, 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shobha Kantamneni, Ph.D
Patent Examiner
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SHENGJUN WANG
PRIMARY EXAMINER